

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,167	10/27/2003	Jan Ryderstam	81044557 (201-0705)	3060
PRICE, HENEVELD, COOPER, DEWITT & LITTON, LLP 695 KENMOOR S.E. P. O. BOX 2567 GRAND RAPIDS, MI 49501-2567			EXAMINER	
			NGUYEN, CUONG H	
			ART UNIT	PAPER NUMBER
			3661	
			MAIL DATE	DELIVERY MODE
			10/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/694,167

Filing Date: October 27, 2003 Appellants: JAN RYDERSTAM ET AL. **MAILED**

OCT 2 9 2007

GROUP 3600

Marcus P. Dolce For Appellants

EXAMINER'S ANSWER

(1) Real Party In Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any other related appeals, interference, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Boards' decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

There is no Amendment After Final.

(5) Summary of The Claimed Subject Matter

The examiner agrees with the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be reviewed

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

US Pat. 6,528,959 by Kitano et al. published on March 04, 2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims. The ground(s) for rejection are provided here for the convenience of both Appellants and the Board of Patent Appeals.

Claim Rejections - 35 USC § 102

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351 (a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- I. Claims 1-5, 8, and 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kitano et al (US Pat. 6,528,959).
- A. As per claim 1, Kitano teaches what claims.

The examiner respectfully submits that what applicant claims is merely a comparison step, then modifying that number: comparing a desired number to an available capability – then modify that number if that number not met; Kitano discloses about determining a tractive force request of a driver of the vehicle; determining/demanding an actual tractive force of the vehicle; and modifying the actual tractive force of the vehicle to be equal to the tractive force request/demand (see Kitano, FIG.3 "actual tractive force" is "TARGET FRONT-WHEEL DRIVING FORCE" S35 and "CALCULATE TARGET FRONT-WHEEL DRIVING FORCE"

is a modifying/modeling step; column 3, lines 35-48, column 7, lines 18-24, 57-67, especially col. 7, lines 17-20 showing a modification of targeted wheel speed/driving force to solve a difference between a desired force/speed and a current/actual force/speed through a simple comparison (see col. 17, lines 45-50, and lines 56-62); and figures 2, 3, and 29).

- B. As per claim 2, Kitano discloses measuring the actual speed of the vehicle (see Kitano, FIG.4, and column 3, lines 32-33); sensing a position of the acceleration pedal (see Kitano, column 12, lines 14-17); looking up the tractive force request corresponding to the actual speed and the position of the acceleration pedal (note that this is merely a step claim the examiner submits that comparison steps are essentially made by Kitano, see Kitano, col. 13, lines 56-59, col. 15 lines 19-20; and the "chart" in Fig. 4 also see Figs. 24-25 i.e., the x, y coordinates and a curve that forms from changing x, y coordinates).
- C. As per claim 3, Kitano discloses estimating/calculating/modeling the actual tractive force (see Kitano, Fig.3 with a step of "CALCULATE TARGET FRONT-WHEEL DRIVING FORCE" S35, and the abstract).
- D. As per claims 4 and 14, Kitano discloses about calculating/estimating/modeling the tractive force as a function of the vehicle speed (see Kitano, FIG.4, and the abstract).
- E. As per claims 5, 8, and 15, Kitano discloses a percentage of available/"WITHIN THE RANGE" tractive force of the vehicle (see Kitano, column 41, lines 1-15).
- F. As per claim 13, Kitano discloses determining a tractive force request of a driver of the vehicle; determining an actual tractive force of the vehicle; and modifying the actual tractive force of the vehicle to be equal to the tractive force request (see Kitano, same rationales to rejection of claim 1 above; also column 3, lines 35-48, column 7, lines 18-24, 57-67 and figures

2, 3, 29); measuring the actual speed of the vehicle (with a vehicle speed-detecting means, see Kitano, column 3, lines 32-33); sensing a position of the acceleration pedal (e.g., using a position sensor as sensor 13; see Kitano, column 12, lines 14-28); looking up the tractive force request corresponding to the actual speed and the position of the acceleration pedal and modeling actual tractive force (e.g., Kitano suggests about "looking up respective tables"; see Kitano, FIG.4, col.15 lines 18-26, and the abstract).

Claim Rejections - 35 USC § 103

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- II. Claims 6-7, 9-12, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitano et al (US Pat. 6,528,959).

Kitano does not "disclose" about "the request for the percentage of available tractive force"; however, Kitano already suggests about using "tractive force in range" that including specifying a percentage of available tractive force – for example, 100% of available tractive force (a maximum number of a capacity) reads on claimed language.

It would have been obvious to one with ordinary skill in the art to implement Kitano's teaching to specify a step that teaches a percentage of available tractive force for an advantage of deriving a more accurate calculation of tractive force demanded within a capacity, one of that advantage is to save consumed energy.

The examiner respectfully submits that a claim directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. See *In re Danly*, 263

F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). When interpreting functional language, if the prior art is capable of performing the claimed function "even if not directly disclosed", it anticipates. *In re Schreiber*, 128 F.3d 1473, 1478, 44 USPQ2d 1429, 1432 (Fed. Cir. 1997).

(10) Response to Argument:

A. What the applicant claims in broad independent claim 1 is merely a comparison of 2 numbers; therefore, it is within Kitano's application – It asserts that when a driver inputs a request for a tractive force, he/she should know about a capability of that vehicle to modify/change that vehicle's tractive force via a gas/acceleration pedal (i.e., by varying an engine's output) – that is exactly what says in a very broad claim 1 (see pending para. [0002], and claim 1). Applicants argue that Kitano does not "explicitly" disclose claim 1; however, this claim is very broad enough to cover steps that Kitano already taught. It is recognized that what claim 1 asserts, are really a normal vehicle's control works – "modifying" functions are already included in calculations of Kitano for a target value ("modifying" function is merely makes changes according to input values).

According to the application's definition (see para. [0001]), a tractive force is transmitted via a vehicle's wheel to a riding surface to move that vehicle – that is essentially a well-known regular control force on any vehicle having wheels (to move a vehicle based on a currently "resistive" force).

Para. [0003] asserts another aspect of controlling a tractive force (i.e., a vehicle's speed) by using a look-up table and varying a gas pedal accordingly (see FIG. 3) – this is NOT inventive because a table that uses to doing this purpose has been available. The amended phrase

of "the percentage of available tractive force" does not make the pending claims allowable since

a step of displaying (these data) to a driver is not inventive, this is merely a driver's estimation.

The examiner respectfully maintains prior interpretation for rejections on the applicant's pending

"method" claims (note: claiming a tractive force of a vehicle is merely claiming a certain/specific

force applying on a vehicle).

Again, the examiner respectfully disagrees with the applicants' arguments that Kitano

does not disclose what the applicants claim especially col. 7, lines 17-20 showing a modification

of targeted wheel speed/driving force to solve a difference between a desired force/speed and a

current/actual force/speed through a simple and well-known comparison (see col. 17, lines 45-

50, and lines 56-62).

For the above reasons, it is believed that the rejections should be sustained.

(11) Related Proceedings Appendix

There is no submitted evidence, or related appeal, or interference pending during this

- application.

Respectfully submitted,

worghnywyen Cuong H. Nguyen

7

An appeal conference was held on Oct. 04, 2007 with:

SPE Thomas Black, Art Unit 3661

Appeal Brief Specialist Meredith Petravick (TC 3600)

Mr. Marcus P. Dolce (Reg. no. 46,073)
Price, Heneveld, Cooper, DeWitt & Litton, LLP